

REMARKS

Claims 1 to 26 are pending. Claims 27 to 28 are canceled.

§ 103 Rejections

Claims 1-3,5-16 and 18-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over DiZio et al. (US 6,455,152, "DiZio et al. '152") in view of Renz et al. (US 6,187,845).

The Patent Office asserts that DiZio et al. '152 teaches an adhesive-coated article (Abstract) comprising woven, nonwoven, films, open weaves, and loose nonwoven webs (col. 7, lines 34-42). The Patent Office further asserts that DiZio et al. '152 teaches the substrate surface preferably has a web surface and may be made of polypropylene (col. 10, lines 4-19), and that the adhesive may be a pressure-sensitive adhesive (PSA) such as silicones (col. 1, lines 60-64). The Patent Office further asserts that DiZio et al. '152 teaches the adhesive may contain one more PSA resins, cross-linking agents, and UV stabilizers (col. 7, lines 53-67), and that the PSA is applied to a major surface of the substrate and has a release liner (col. 3, lines 20-47). The Patent Office admits that DiZio et al. '152 is silent as to the use of an ultraviolet absorber and the specific composition of the pressure sensitive adhesive.

The Patent Office asserts that Renz et al. teach pressure sensitive adhesive compositions that are rendered stable against ultraviolet (UV) degradation via the incorporation of benzotriazole UV absorbers (Abstract and col. 4, lines 24-35), and that the adhesive compositions may be used to protect interior structures, textiles, and fabrics (col. 3, lines 40-43). The Patent Office further asserts that Claim 11 recites that the adhesive composition may contain between 0.1 to 20 weight percent of benzotriazole. The Patent Office further asserts that the adhesive composition may additionally contain up to another 20% of another UV absorber, hindered amines, or conventional stabilizers (col. 13, lines 19-45). Additional adhesives may be added to the pressure sensitive adhesive composition (col. 20, line 57 - col. 22, line 26).

The Patent Office argues that since DiZio et al. '152, and Renz et al. are all from the same field of endeavor, (i.e., pressure sensitive adhesive coated nonwoven articles), the purposes

disclosed by Renz et al. would have been recognized in the pertinent art of DiZio et al. and that it would have been obvious at the invention was made to a person having ordinary skill in the art to have made the article of DiZio et al. with the composition of Renz et al., motivated by the desire to create an article that provides excellent stabilization (col. 2, lines 34-41; Renz et al.).

Without agreeing to the Patent Office's characterization of DiZio et al. '152, Romanowski, or Renz et al., or admitting that the rejection is even proper, Applicants refer to their previous Amendment dated Oct. 31, 2005, in which it was shown that it is known in the pressure sensitive adhesive arts that both acrylic pressure sensitive adhesives and silicone pressure sensitive adhesives generally have good resistance to degradation by sunlight (see, e.g., previous Amendment dated Oct. 31, 2005, remarks in response to the rejection of claims 1, 3-5, 7-16 and 20-26 under 35 USC § 103(a) as being unpatentable over Nishikawa et al. as evidenced by Romanowski in view of Renz et al.). Hence, Applicants submit that it would be known to one of ordinary skill in the pressure sensitive adhesive coated nonwoven articles art that acrylic (e.g., poly(meth)acrylate) and silicone pressure sensitive adhesives do not generally require protection from exposure to sunlight using ultraviolet light stabilizer(s).

In view of this, one of ordinary skill in the art would clearly not be motivated to include the highly elevated levels of ultraviolet light stabilizer(s) in claim 1 absent impermissible hindsight reasoning based on Applicants' own disclosure, especially in view of added cost and the potential for adhesion problems (e.g., see previous Amendment dated Oct. 31, 2005, Attachment A, "Handbook of Pressure Sensitive Adhesive Technology", page 396 which states in pertinent part:

"The elimination of compositional differences in the adhesive coating is highly desirable: the presence of low molecular weight additives at the adhesive-adherend interface can affect the bond."

It is submitted that ultraviolet light stabilizers of the types mentioned in DiZio et al. '152 and Renz et al. are low molecular weight additives within this meaning.

Further, even assuming *arguendo* (and without admitting that such is the case) that there was some motivation to combine the references in the manner asserted by the Patent Office, it is

submitted that Applicants have discovered that by incorporating the claimed high levels of ultraviolet light stabilizer into a pressure sensitive adhesive layer that is in contact with a surface of a fabric, it is surprisingly possible to impart a significant degree of ultraviolet light stability to a fabric (i.e., not just the adhesive) to ultraviolet light as evidenced, for example, on page 11 of the specification, in Table 1, Examples 1 - 5 and Comparative Examples A - F (see, e.g., previous Amendment dated Oct. 31, 2005, remarks in response to the rejection of claims 1, 3-5, 7-16 and 20-26 under 35 USC § 103(a) as being unpatentable over Nishikawa et al. as evidenced by Romanowski in view of Renz et al.).

For at least these reasons, it is submitted that the rejection of claim 1 has been overcome and should be withdrawn. Claims 2-3, 5-16, and 18-26 each add additional features to patentable claim 1 and are therefore likewise patentable.

In summary, the rejection of claims 1-3, 5-16 and 18-26 under 35 U.S.C. §103(a) as being unpatentable over DiZio et al. '152 in view of Renz et al. (US 6,187,845) has been overcome and should be withdrawn.

Claims 4 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over DiZio et al. (US 6,455,152, "DiZio et al. '152") in view of Romanowski (US 2004/0071916) and Renz et al. (US 6,187,845).

The Patent Office asserts that DiZio et al. '152 teaches an adhesive-coated article (Abstract) comprising woven, nonwoven, films, open weaves, and loose nonwoven webs (col. 7, lines 34-42). The Patent Office further asserts that DiZio et al. '152 teaches the substrate surface preferably has a web surface and may be made of polypropylene (col. 10, lines 4-19), and that the adhesive may be a pressure-sensitive adhesive (PSA) such as silicones (col. 1, lines 60-64). The Patent Office further asserts that DiZio et al. '152 teaches the adhesive may contain one or more PSA resins, cross-linking agents, and UV stabilizers (col. 7, lines 53-67), and that the PSA is applied to a major surface of the substrate and has a release liner (col. 3, lines 20-47). The Patent Office admits that DiZio et al. '152 is silent as to the type of nonwoven material to be used as backing in the adhesive tape, the use of an ultraviolet absorber and the specific composition of the pressure sensitive adhesive.

The Patent Office asserts that Romanowski teaches a nonwoven pressure sensitive adhesive tape comprising a nonwoven fabric layer (Abstract and [0062]. Nonwoven fabrics include spunbonded, needle punched (needletacked), and spunlaced fabrics [0062].

The Patent Office asserts that Renz et al. teach pressure sensitive adhesive compositions that are rendered stable against ultraviolet (UV) degradation via the incorporation of benzotriazole UV absorbers (Abstract and col. 4, lines 24-35), and that the adhesive compositions may be used to protect interior structures, textiles, and fabrics (col. 3, lines 40-43). The Patent Office further asserts that Claim 11 recites that the adhesive composition may contain between 0.1 to 20 weight percent of benzotriazole. The Patent Office further asserts that the adhesive composition may additionally contain up to another 20% of another UV absorber, hindered amines, or conventional stabilizers (col. 13, lines 19-45). Additional adhesives may be added to the pressure sensitive adhesive composition (col. 20, line 57 I col. 22, line 26).

The Patent Office argues that since DiZio et al. '152, Romanowski and Renz et al. are all from the same field of endeavor, (i.e. pressure sensitive adhesive coated nonwoven articles), the purposes disclosed by Romanowski and Renz et al. would have been recognized in the pertinent art of DiZio et al., and it would have been obvious at the invention was made to a person having ordinary skill in the art to have made the article of DiZio et al. with the fabric of Romanowski, motivated by the desire to create a favorable flexible tape (Abstract; Romanowski), and the composition of Renz et al., motivated by the desire to create an article that provides excellent stabilization (col. 2, lines 34-41; Renz et al.).

Without agreeing to the Patent Office's characterization of DiZio et al. '152, Romanowski and Renz et al., Applicants submit that claim 1 is patentable over DiZio et al. '152 in view of Renz et al. as discussed hereinabove. Romanowski fails to overcome the deficiencies of the combination of DiZio et al. '152 in view of Renz et al., hence claim 1 is patentable over the combination of DiZio et al. '152 in view of Romanowski and Renz et al. Claims 4 and 17 each add additional features to patentable claim 1 and are likewise patentable.

In summary, the rejection of claims 4 and 17 under 35 U.S.C. §103(a) as being unpatentable over DiZio et al. '152 in view of Romanowski and Renz et al. has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Respectfully submitted,

6-26-06
Date

By: Bradford B. Wright
Bradford B. Wright, Reg. No.: 34,459
Telephone No.: 651-736-4172

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833